

CORE UNIT OF HEAT EXCHANGER HAVING ELECTRIC HEATER

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Abstract

Provided is a core unit of a heat exchanger having an electric heater. The core unit includes: a plurality of flat tubes 32; a plurality of pleated fins 34 disposed between two adjacent flat tubes 32; a pair of support plates 46 and 46' attached to a top pleated part of the pleated fins in a predetermined part of the core unit between the two pleated fins instead of the flat tubes; and an electric heater 48 disposed in the pair of support plates. Since insulating plates 52 and 52' are closely disposed on the top pleated part opposite to the support plate in the pleated plate, to which the support plate is attached, to insulate the flat tube from the pleated fin to prevent transfer of heat generated from the electric heater to cooling water, it is possible to prevent performance deterioration. In addition, by forming the pleated fin adjacent to the electric heater to a height more than 5mm and setting a heat-generating device to a temperature higher than 170°C, it is possible to provide sufficient radiating capacity and perform efficient heat transfer.